DOCUMENT RESUME

ED 225 590 IR 050 089

AUTHOR Moughon, Anne; Elliott, Jess P.

TITLE Georgia Dissemination Capacity-Building Project. Final Report.

INSTITUTION Georgia State Dept. of Education, Atlanta.

SPONS AGENCY National Inst. of Education (ED), Washington, DC.
PUB DATE 81
CONTRACT NIE-G-78-0049
NOTE 58p.
PUB TYPE Reports - Descriptive (141)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Charts; *Educational Resources; Elementary Secondary Education; Federal Aid; *Information Dissemination; Information Services; Justice; Online Systems; Program Descriptions; Questionnaires; Reference Services; Rural Education; School Districts; Shared Services; *State Departments of Education; State Programs; Tables (Data)
IDENTIFIERS Educational Information; *Georgia; *State Capacity Building Program

ABSTRACT

This report summarizes the Georgia Dissemination Capacity-Building Project, which from 1976 to 1981 funded increased dissemination of information on educational resources by Georgia's Education Information Center (EIC). Following a brief introduction containing project background information, five report sections provide: (1) a summary of major project components and activities, including EIC compilation of individualized research packets based on computer or manual searches of the educational literature, and other EIC services to the State Department of Education, intermediate agencies, and local school systems; (2) a chart comparing EIC services before and after the project; (3) a discussion of the transfer of EIC funding from federal to state and other sources; (4) an examination of the project's involvement in promoting equity in areas related to race, sex, the handicapped, and rural education; and (5) a project impact statement comprising results of an EIC user survey, three case histories and additional brief project outcomes, and the final project impact report. Appendices include an evaluation of EIC operations from 1979 to 1981 with data on specific EIC services, a sample user request form for obtaining educational information from EIC, and an EIC literature search evaluation form with notation of evaluation results for 1979 to 1981. (ESR)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)
✗ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED225590

FINAL REPORT

Georgia Dissemination Capacity-Building Project
NIE - G - 76-0049 (Project No. 6-0032)
July, 1976 - September, 1981

Prepared by

Dr. Anne Moughon
Project Manager

and

Dr. Jess P. Elliott
Project Director

IR050089

TABLE OF CONTENTS

Introduction		1
Background		2
I. Major Components and Activities		3
A. Resources	3	
B. Linkage	10	
C. Leadership/Coordination	18	
II. Comparison of-Program Status prior to and upon Completion of Project		23
III. Institutionalization		26
IV. Equity		29
V. Impact of the Program on Improvement of Practice		31
Appendix		41

Georgia Capacity-Building Project
NIE-G-76-0049; Project 6-0032
7/15/76 - 9/30/81

FINAL REPORT

Introduction

The objectives and activities of the Georgia Dissemination Capacity-Building Project were based on two major goals set by the National Institute of Education for the State Capacity-Building Program, that is, to assist state departments of education in providing

- ready access to knowledge resources, including educational research, new products, and improved practices by educational practitioners, and
- facilitation of effective use of such resources.

The three primary objectives of the Georgia project were:

1. to increase the scope, quality, and effectiveness of information dissemination activities by extending the state's Education Information Center (EIC) services to all local systems, strengthening the EIC resource base, and evaluating EIC effectiveness;

2. to provide staff development opportunities which would augment and improve the skills of State Department of Education (SDE) and intermediate service agency (CESA) consultants in providing information and technical assistance to local school systems;

3. to improve the coordination of dissemination resources, linkage and incentives in the State Department of Education.

The overarching goal of the project was to build an improved information dissemination and technical assistance capability in the SDE in order to provide a sounder basis for educational decision-making in the department, in intermediate agencies, and in local school systems. This was expected to result in more rational decisions and better problem-solving by local educators, and to impact educational improvement efforts statewide.

The Georgia Capacity-Building Project has contributed substantially to the EIC's ability to serve its clients. During the period of NIE funding 2,545 clients were served with individualized packets prepared in response to their research requests, and 6,279 other information services

were provided. Systematic evaluation of the packets indicated that clients judged them to be highly relevant and useful. Based on client estimates of time saved and EIC records of staff time consumed, approximately 6,744 person days were saved beyond the EIC staff's own effort. The time saved, translated into monetary terms, is valued at about $1,025,000.

Background

Georgia is geographically the biggest state east of the Mississippi. Still largely rural and agricultural, 109 of its 187 school systems have fewer than 3,000 students in average daily attendance. The fifteen largest systems, seven of which are in the metropolitan Atlanta area, have an ADA of 10,000 or more. These systems enroll about 47 percent of the approximately 1,000,000 students who currently attend Georgia's public schools in grades K-12.

Student achievement in the basic skills areas of reading and math has been low, like student achievement throughout the deep south. In 1976, the year prior to the inception of the Georgia project, mean fourth grade achievement in basic skills was six months below the national average. The mean reading achievement of eighth graders lagged eleven months behind the national average.

Because there are many rural systems which cannot afford to employ a full range of educational consultants (some have none at all), in 1972 the state established regional Cooperative Educational Service Agencies (CESA) which provide technical assistance to sixteen consortia of local school systems. Although there are 18 school systems which do not belong to a CESA, most of these are large enough to employ their own cadre of educational specialists.

The State Department of Education has approximately 120 consultants who provide consultation and technical assistance in virtually every program and ancillary service area. At the beginning of the Georgia capacity-building project, these included a small but effective group of department consultants assigned by regions to provide coordinated Title III and staff development consultation. This group had evolved a systematic educational improvement process which was later refined and elaborated by Georgia's Research and Development Utilization Project.

During the five years of the SCB project, there were several important currents affecting public education in Georgia: a renewed emphasis on basic skills, the implementation of P.L. 94-142, the passage of a state board policy mandating competency-based high school graduation requirements and its subsequent implementation, and the continuing development and implementation of performance-based teacher certification.

I. Major Components and Activities of the Georgia Capacity-Building Project

A. Resources

The central information dissemination component of the Georgia project has been the Education Information Center (EIC). The center, in operation since 1973, has undergone a remarkable positive evolution over the last five years as a result of NIE funding.

Prior to the beginning of the project in October 1976, the EIC existed primarily to assist educators in accessing the ERIC data base. The department maintained a standing order for the ERIC microfiche collection and, in September 1973, had begun providing computer searches of ERIC to department and CESA staff, and to local superintendents and their central office staff.

The EIC staff then consisted of only one full-time and one half-time professional, both supported by Title V funds. Because of the small staff, the center was little publicized, and most requests came from personnel housed in the same building. In FY 76, the year preceding the beginning of the project, there were 255 requests in all, about 45 percent of which originated within the department. Only 19 percent came directly from local school systems. In June 1976, the EIC handled a total of 15 requests.

The main product of an EIC search was a computer printout, followed up with ERIC microfiche duplicates, if requested. It was rare for a computer search to be accompanied by original documents from the EIC collection or to be followed by a document request from the client. While the center had both vertical subject files and a collection of about 2,000 documents, these had been so randomly acquired and poorly cataloged as to be virtually useless. The EIC also had indexes to RIE and CIJE and some basic reference tools.

In the same building with the EIC was the Public Library Services Division. It maintained a large collection of journals and professional books in education, but these resources were not often consulted by the EIC staff in connection with research requests.

No formal evaluation of any kind was made of EIC services or impact.

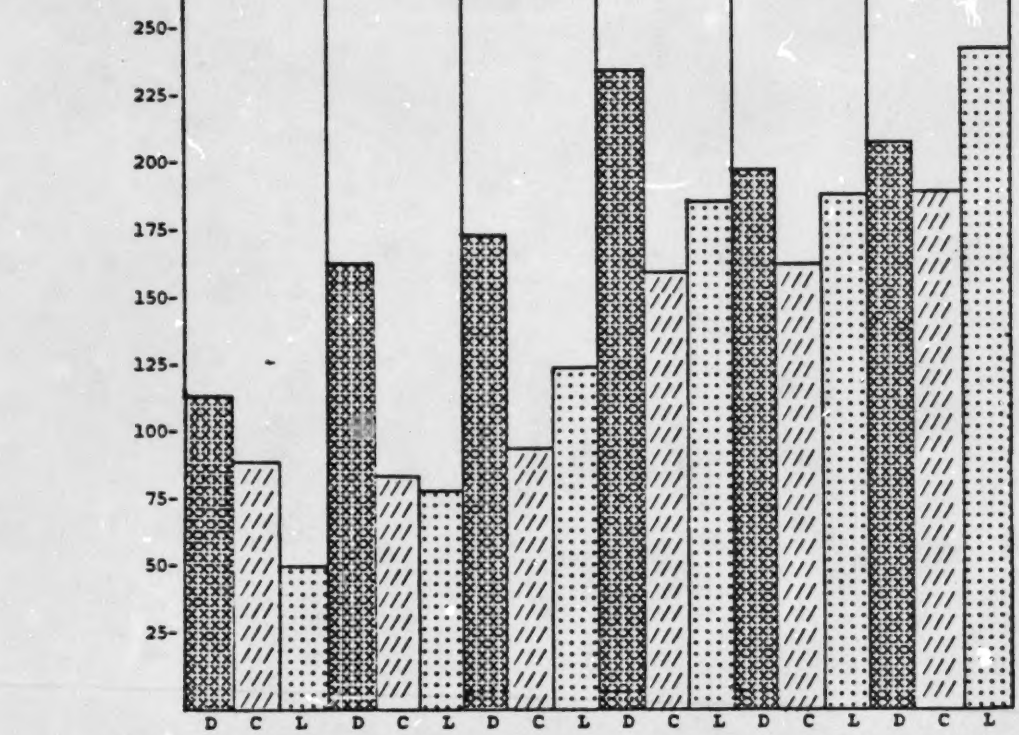
The EIC also provided a current awareness service to department staff, which usually took the form of newsletter clippings or copies of journal articles.

In the year before the project began, the staff provided 895 other materials or assistance over and above the 255 requests for computer printouts.

In FY 81, the last year of the project, the EIC responded to 646 research requests. Approximately 300 of the research packets prepared included selected documents as well as printouts. The staff also provided other materials or assistance on 1,543 occasions. Over the course of the entire project, the EIC staff handled 2,545 research requests.

DOE, CESA, and Local Requests for
EIC Information Research: FY76-FY81

No. of Requests	FY76	FY77	FY78	FY79	FY80	FY81
TOTAL FOR YEAR	255	356	390	575	542	646



D=Dept. of Ed.

C=CESA

L=Local

7

These statistics may seem unimpressive compared to states that handle thousands of requests annually. To fully appreciate them, one must understand the profound change in the character and quality of the research services which the EIC has been able to provide to its clients as a result of SCB funding.

As the project got underway, NIE funds made it possible to begin enlarging the research staff. This meant that we could handle more requests and could begin publicizing the EIC. A choice had to be made between continuing the same services and extending access to additional client groups, e.g., school principals, or maintaining the same client groups and substantially improving the quality of the services provided.

Project leadership staff had visited RISE in Pennsylvania, SMERC in California, and the Texas Information Service, and had become acquainted with the various types and levels of service offered by these agencies.

It was decided that a greater positive impact would probably be realized by continuing to serve the same client groups, but to diversify the types and levels of research service offered and, most notably, to include the option of a search-in-depth, such as that provided by RISE.

The EIC began offering four levels of service to all clients and a fifth level to top department administrators.

LEVEL	PROCESS	PRODUCT
1	Computer or manual search for specific documents or or authors.	The requested document or a computer printout of publications by the specified author(s).
2	Computer search of all data bases expected to yield information on client's topic.	Research packet containing an offline computer printout of bibliographic citations and document resumes.
3	Computer search as in level 2, plus search of EIC files for relevant documents.	Research packet containing offline printout and readily available source documents.
4	Computer search, plus search-in-depth of all available information sources.	Research packet containing offline printout, EIC selected source documents, and consultant or site references.
5	Same as level 4, plus EIC staff synthesis or summary of literature review; or development of original information.	Summary or synthesis of findings.

The level of search to be performed is agreed upon with the client at the time the request is negotiated. Although a research packet may be built on the knowledge gained from having already handled a similar request, and may include some of the same documents selected for an earlier packet, up to now no packet has simply been duplicated; each one is tailored to the unique needs and situation of the individual requester.

Prior to the project, most research packets contained only an offline printout from a computer search of ERIC. Currently, the average packet contains an offline printout of 58 citations, four documents on microfiche, five document reprints, and one document on loan.

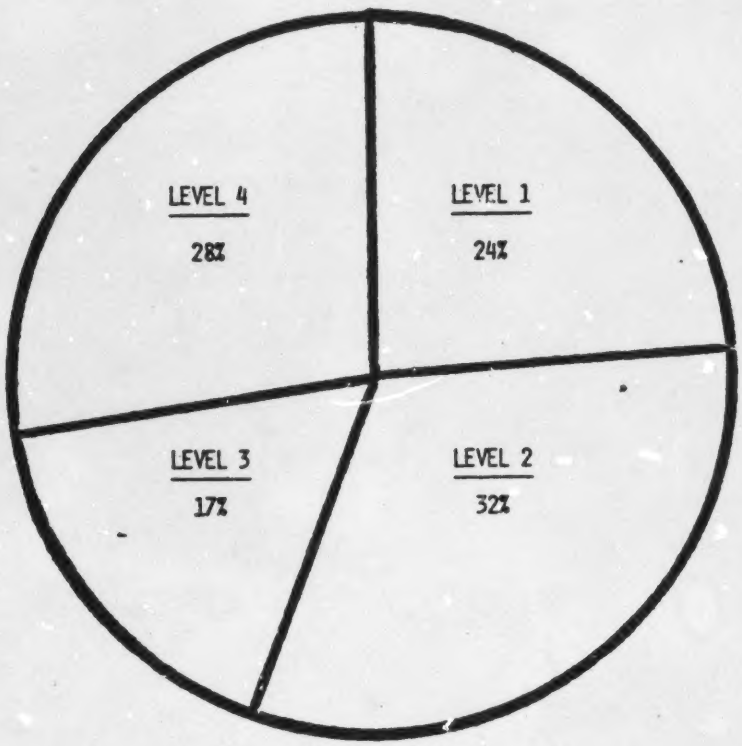
Research packets are the final result of an information retrieval and review process which typically involves the researcher in locating, reviewing and analyzing at least five times as many documents as are sent to the client. In the most recent evaluation of EIC services, covering the twenty-five month period ending in March 1981, the data showed that in preparing 594 Level 3 and 4 searches, the research staff reviewed 40,147 document resumes found on computer printouts. A great many of these, estimated at 10,000 documents, were also reviewed in full on microfiche or in periodicals. In addition, many more original documents were reviewed at the two libraries to which the staff has ready access, in the Division of Public Library Service, and at Georgia State University. The EIC's own collections were also searched. From a total of well over 40,000 documents screened, the research staff eliminated more than 30,000 which had insufficient relevance or merit to warrant the client's attention. Thus, only about 20 percent of the material reviewed was sent to the client in his or her research packet.

In this era when electronic data retrieval and extensive data bases make information overload a major problem, one may fairly conclude that the review, analysis, and screening of materials by the staff contributes significantly to the efficient use of the information by requesters. This is strengthened by the fact that 98 percent of requesters report that the amount of information they receive in research packets is about right.

In response to 646 research requests in FY 81, clients received 37,468 document citations on printouts, 2,584 documents on microfiche, 3,230 document reprints, and 646 documents on loan from the EIC collection.

Currently, the demand for EIC requests is apportioning itself into the four service levels as illustrated below.

FIGURE 1: DISTRIBUTION OF SEARCH REQUESTS ACROSS LEVELS



The project has made it possible for the EIC to provide a much better follow-up documentation service, including not only microfiche but also journal articles, dissertation abstracts and interlibrary loans. Surprisingly, there is a considerably greater demand for follow-up documentation now than there was when most clients received only a print-out. In fact, over the past year, the greatest growth in requests has been for Level 1 searches, i.e., for specific documents.

Currently, the turnaround time from request to mail-out is as follows:

Level 1 - 2.4 working days
Level 2 - 7.1 working days
Level 3 - 10.7 working days
Level 4 - 14.2 working days

The turnaround time on levels 2-4 includes a 3-4 day wait for the printout to arrive by mail from California. We expect to be able to reduce or eliminate this in the future by electronic means which will permit same-day generation of the final printout in Atlanta.

It should be emphasized that although the project has elected to serve directly only 1500-2000 consultants and administrators in public education, every teacher and principal has access to the EIC through his or her local central office, CESA, or GLRS, or through a department staff member, provided that the primary requester is involved in helping them solve a job-related problem. No personal or purely academic searches are performed for any client.

The SCB project enabled the department to increase the staff of the EIC from 2½ to 9: a coordinator, two senior research specialists, two research specialists, two library assistants, a secretary and a VOT student assistant. Increasing the staff has impacted the quality of the information resource base in two ways. The research staff is now able to exploit much more thoroughly the information resources available through other agencies, e.g., Georgia State University. We have also been able to significantly expand and make usable the EIC's own document collection.

Adding a library assistant to the staff (plus NIE funding) gave us the means to establish an active acquisitions program. While the department continued to underwrite our ERIC standing order, project funds made possible the acquisition of the Dissertation Abstracts microfiche file in education. We have also added approximately 2,000 documents to our original document collection, and greatly expanded the vertical subject file holdings, largely by duplicating journal articles judged to be particularly good. We also acquired about one hundred documents for our basic collection of references that are useful to have available at all times.

However, we have continued to coordinate our acquisitions with those of Public Library Services (PLS), leaving all journal holdings to them and requesting that they purchase most hardback or expensive books that we need to have access to. Having sufficient staff to search PLS and Georgia State University's libraries has made possible greater use of the journal literature by the research staff, and a much more active journal article retrieval service for requesters. Public Library Services has been extremely cooperative in handling our interlibrary loan requests, which has given us access to many journals that would otherwise be unavailable.

About midway in the project, it became clear that one library assistant could not handle acquisitions, circulation, and cataloging of the document collection. At one point, we had developed a backlog of about 450 uncataloged documents. This, added to the problems caused by the poor cataloging (indexing) of the 2500-3000 documents already in the collection, made it very hard for the research staff to use the document collection effectively.

Employing a second library assistant (an experienced teacher with a master's degree in education) enabled us to develop an efficient and effective cataloging process. The backlog of uncataloged documents has been virtually eliminated and we now have approximately 2000 current

or recent documents in the EIC collection that have been appropriately indexed with 5-20 ERIC descriptors. Inasmuch as the document collection has to be purged annually in accordance with a very stringent records retention standard, we have gradually eliminated most of the "deadwood" from the files. We also review and purge the subject files annually and feel that we now have a comprehensive and excellent collection of vertical file materials.

In addition to an active acquisitions program, we have engaged in an active resource development program over the course of the project. The three major activities were:

1) developing and contracting for the implementation of a key-sort retrieval system for all nationally validated and Georgia-validated programs;

2) cooperating in the development of eleven comprehensive reviews of the research literature in major areas of educational practice, which served as a foundation for the comprehensive review of state standards and the design of some new standards;

3) development of a number of syntheses or summaries of research, including

   - self-contained vs. departmentalized organization in elementary schools
   - factors related to student achievement
   - effects of kindergarten on first grade success; and

4) development of a list of Georgia sites where effective individualized instruction was being conducted and could be observed.

In cooperation with other agencies, we improved the resource base by

1) serving as a feedforward point for department documents to be systematically and regularly submitted to ERIC;

2) providing research packets which formed an information base for the development of the Georgia Research and Development Utilization project's several documents, which are included in the collection called "Planning Education Improvement;"

3) providing the computer searches from which lists of curriculum, instructional, and other career education resources were compiled in seventeen areas of educational practice; and

4) granting sixteen CESAs funds to improve their own information resource files, and providing each CESA with a validated program retrieval system so that they could access and use their validated program materials more effectively.

Coordination with other agencies in retrieving and sharing information became a part of our standard operating procedure. Phi Delta Kappa designated the EIC as a Reavis Reading Center and provided us with all of their publications. Other information services such as RISE, the Education Commission of the States, the National Center for Educational Statistics, the AEL Regional Exchange, and the Southwest Educational Development Laboratory have consistently been extremely cooperative in assisting us with information requests.

The EIC staff has also developed an informal but wide-ranging knowledge of human resources and places where promising practices can be observed which enables us to refer requesters appropriately to such sources of additional information.

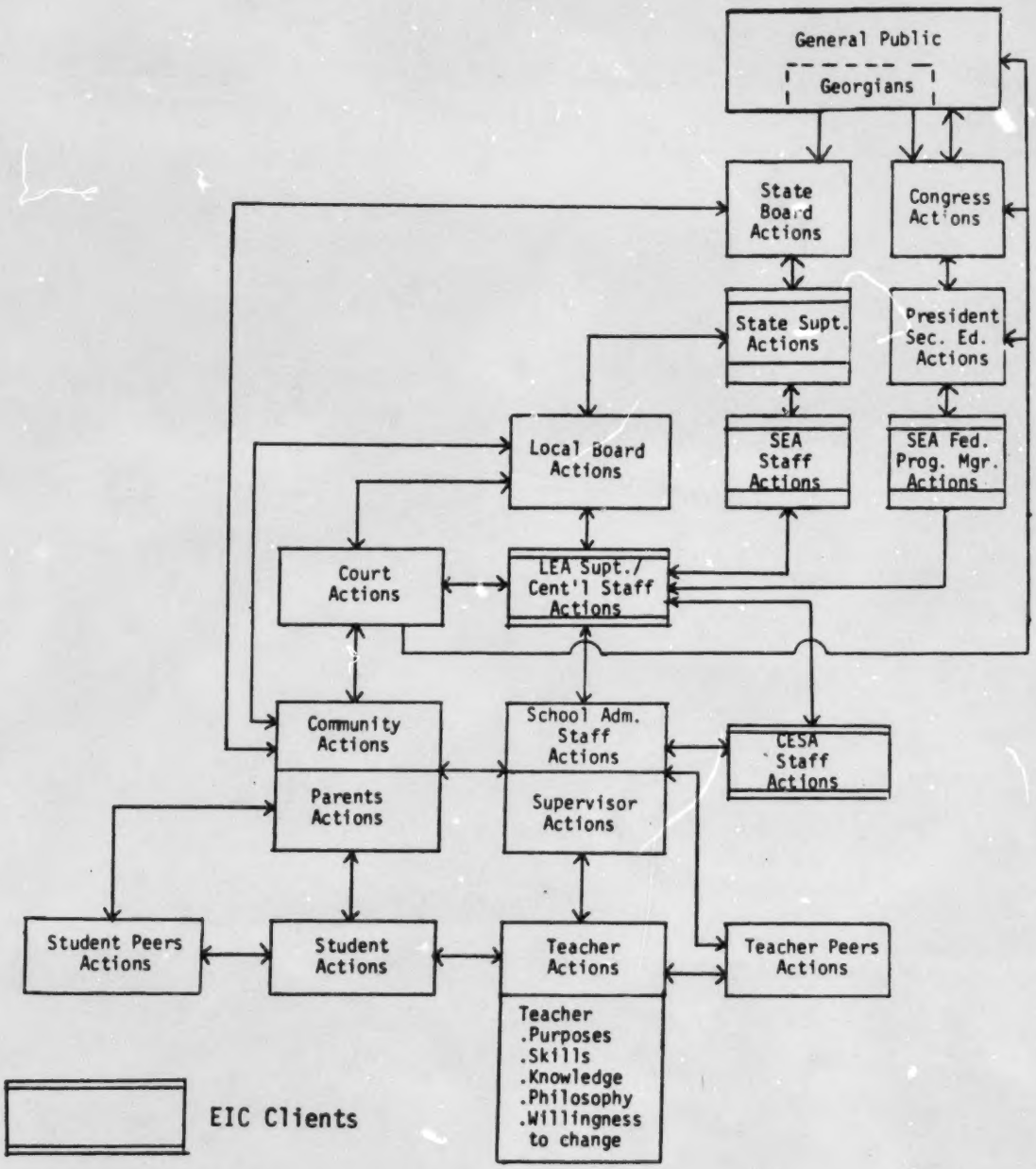
Finally, the project has made possible greatly increased access to and utilization of information retrieval via computers. EIC expenditures for DIALOG services have grown from approximately $2,500 in FY 76 to $12,000 in FY 81.

B. Linkage

The linkage model used in the project could be characterized as both "non-coupled" and "loosely-coupled." The chart on the next page illustrates the complexity of efforts to change, and thereby improve the educational environment of Georgia youth. The EIC assists educators who have the responsibility to operate school systems and who work directly or indirectly with teachers in staff and program development.

The project "linkers" were the clients of the Education Information Center, that is, Department of Education staff, intermediate agency staff, and local system central office staff. There were approximately 150 potential clients in the department, 250 in CESAs, and 1500 in local systems. Ninety percent of those served were technical assistance personnel whose principal job assignment is to link others to knowledge of improved educational practices and to assist them in its implementation. This may, at times, take the form of input to a higher decision-making level in their own agency, but more often the information flow is to practitioners at the building level who need assistance in solving a problem or making an improvement. Data obtained from the most recent analysis of EIC impact indicates that primary requesters shared information received in each EIC research packet with 23 others, on the average. Although building level personnel are not directly served by the EIC, their access to information has been improved by our serving those who help principals and teachers become aware of and use new knowledge.

Most EIC clients are employed by their agency because of their expertise in particular problem areas where consultation and advice are frequently requested, or where local improvement is needed. Most have years of experience in schools, and are both knowledgeable about and well-known in the region they serve. Since their job is to advise and help solve problems in their area of responsibility, they readily see the benefit of having improved access to knowledge about new developments.



Interactions Among Educators and Citizens Involved in Educational Improvement in Georgia

From the beginning, the Georgia project has been "field-driven," that is, the focus has been on assisting educators in solving problems that they themselves had identified. We continue to feel that it is very important that clients see the EIC as a support service concerned with helping them advance their agenda, not trying to get them to advance ours.

Most of the technical assistance personnel served by the project--specialists, consultants, generalists, curriculum directors--also have skills in the interpretation and application of knowledge. In fact, if they had more time for research and had ready access to the knowledge base, they could probably sift through the literature, analyze it, and select the information that is most relevant to the solution of their problem better than an EIC research specialist who must deal with information in many different areas and lacks a consultant's expertise. Unfortunately, most consultants and curriculum specialists usually find both time and information to be in short supply. Therefore, one of the major contributions made by the project to knowledge utilization has been to do the largest part of the information location and screening for requesters. This makes it possible for them to deal with a limited number of relevant documents, and to read, analyze, and apply the findings to the problem they are trying to solve.

In the most recent analysis of EIC client evaluation data, we found that the typical requester reported having saved 28 hours of his or her own time by using EIC services. It is clear that EIC research packets enhance the efficiency of clients served.

Encouraging potential EIC users to seek and use better information in job-related problem-solving thus became an important linkage goal of the project. There had been no public relations or awareness efforts made by EIC staff prior to the project because the resource base staff of one and a half professionals was already handling about as many requests as possible. Enlarging the research staff made it possible to begin publicizing the service to various user groups, particularly those outside the department and in rural areas where the need was greatest. Several orientation products and processes were developed and employed during the project: an EIC brochure, an EIC orientation slide-tape, EIC orientation packets, and both ERIC and EIC orientation presentations by project staff. ERIC and EIC orientations were given in every CESA--in some CESAs two or three times in five years. Project leadership spoke to small groups of local superintendents and local curriculum directors. Directors of the Georgia Learning Resources System centers (GLRS) were met with twice. The EIC had a booth at statewide meetings of curriculum directors. Presentations were made at Competency-Based Education conferences, at a comprehensive planning conference, and at the state superintendent's "Bootstrap" meeting for local superintendents. EIC orientation packets were sent to CESA consultants each fall. Presentations about ERIC and/or EIC research services were made to several teacher education classes. Within the department, EIC presentations were made to the staff of the Office of Planning and Development, to all division directors in the Office of Administrative Services, to regional directors, to staff meetings of several divisions, and to those who attended a general orientation session given at an annual staff conference of the entire department.

The net result has been a steady increase in the number of research requests handled by the EIC--approximately 20 percent per year--as well as significant growth in the proportion of requests that come from local educators. The table below shows that requests coming directly from the local level constituted 37 percent of all requests handled in FY 81, compared to 19 percent in the year before the project began.

Change in Client Groups Requesting Research
from Education Information Center
FY 76 - FY 81

	FY 76		FY 81	
	Number of Requests	Proportion of Total	Number of Requests	Proportion of Total
Department of Education	113	44%	207	32%
Intermediate Agencies	87	34%	189	29%
Local Systems	49	19%	242	37%
Other	6	2%	8	1%
Total	255		646	

Research requests are taken by phone, letter, or in person, but if they arrive in writing, they are always negotiated further by phone. The average question negotiation takes seven minutes and many questions are asked in order to clarify and elaborate both the problem and the situational context. Client and EIC staff member agree on the search level and any necessary limitations to the search. Often, the research specialist talks with the client again during the course of the search in order to get further clarification about what is wanted, or to explain problems that have arisen. Research packets are usually delivered to the client by mail and always include explanatory materials about using the computer printout and ordering follow-up documents. About a quarter of all packets include a letter from the researcher which may explain how materials were selected, or how they are organized in the packet, or particular problems encountered in doing the research. It is not unusual for a researcher to discuss the findings with the requester, particularly if he or she is a department staff member.

A number of linker training activities have been conducted during the project, and these have varied to fit the needs of particular groups.

The resource base staff has had both formal and informal training in information retrieval and analysis. Three research specialists were trained in computer searching. Two also had advanced DIALOG training, and two have attended a number of workshops on specific data bases. Two have attended Lockheed's "Online" conferences. The ERIC Clearinghouse for Exceptional Children has held three search workshops in Atlanta during the last five years. Our project co-hosted one of them, and various EIC staff members attended all three workshops.

Training of EIC research, library, and clerical staff is extensive and usually requires about six months to teach the basics of each job. Research staff attend staffing sessions at which current work is discussed. New researchers receive the benefit of the veterans' experience, including suggestions about sources of information, where related activities are going on, and specifics about individual clients' needs or situation.

Research questions in the same problem area are usually assigned to the same researcher, for efficiency's sake and to build individual expertise. We have begun research staff seminars at which a research specialist talks about a "hot topic," such as mastery learning or learning styles, on which she had gained extensive knowledge. This approach seems to be helpful in keeping the research staff up-to-date on current developments in areas in which we receive many requests.

In addition to ERIC and EIC orientations, all CESAs were given an opportunity during the second year of the project to compete for project training grants. Designed to improve their process or implementation skills, the RFP required that a consultant needs assessment be conducted in relevant skill areas. Project funds were awarded to seven CESAs, and extensive training was given to 120 consultants in communication skills, problem-solving, and evaluation skills. Several thousand hours of consultant training were provided in this way. We had planned to continue the grants in the project's third year, but the funds were cut in the project's budget negotation with NIE.

All CESAs received extensive training in the use of the planning and implementation processes and evaluation techniques for educational improvement which were developed by the RDU project with the support of our project. CESA consultants are heavily involved in giving technical assistance in the adoption/adaptation of validated programs so this training was particularly relevant for them. Many department staff members were also either trained or oriented in the use of these materials, including all Title I consultants, the Division of Staff Development, the Division of Educational Development, the Division of Curriculum Services, the Special Education Section, two division in the Office of Vocational Education, the Title IV-C staff, the guidance unit, and the sex equity staff.

During the third year of the project, we assisted Northeast Georgia CESA in a staff development program conducted for their own generalists

and for principals in their area. The theme of this year-long training effort was facilitating effective instructional leadership. Each of the eight seminars, on topics such as planning and implementing the curriculum, included a review of the literature and a review of research as two of the three major components.

During the fourth year of the project, we planned and conducted a two-day symposium on the uses of information in educational decision-making. Jointly sponsored by the Georgia Academy of School Executives, more than a hundred local educators and department staff heard Dr. Jerry P. Walker of Ohio State University, Dr. Carvin Brown and Dr. Ken Matthews of the University of Georgia, Dr. Robert Samples, and Dr. Richard Byrd examine decision-making and information overload, holographics and decision-making, and risk-taking in making decisions.

A major objective of the Georgia project was to develop and implement methods and instruments to provide ongoing evaluation of EIC services and products and to assess their usefulness to educators and their impact on educational practice. Prior to the beginning of the project no formal evaluation had been done.

Over the last five years we have designed and refined two evaluation instruments, one for capturing management information and one for collecting data from clients about their research packets. The latter completes the linkage loop by giving requesters the opportunity to provide feedback to the EIC.

The search request form is used to record data about the client, the topic, the information provided, the turnaround time and, perhaps most important, the staff time required to prepare the packet. (A copy of the present version of this form is appended.) This form has been revised twice since its origination.

The Client Evaluation Form was developed in late 1976 and we began using it for all searches above Level 1 in January 1977. It requests information about client satisfaction regarding the search negotiation, the topic coverage, the amount of information received and whether it was received on time, how the information was used, in what ways it was useful, how many people shared the information with the primary requester, how much time the requester saved by using EIC services, and how useful the EIC is to the requester's professional functioning. This form, designed for client evaluation of individual research packets, is sent to the client four weeks after the packet goes out. The return rate has varied from 74% to 83% over the years. The form has been revised twice. (A copy is appended.)

The data collected on these two forms have been coded and computer-analyed on three occasions for periods covering more than four years of operation. For each of approximately 2000 requests, 40 data elements were examined. A complete report of the latest results is appended. These are the major findings of the evaluation of EIC operations 1979-81:

Between April 1979 and March 1981, the EIC responded to 1,102 requests for research on job-related problems or issues. The information provided was shared by the original requesters with approximately 20,500 other people.

The EIC also provided 2,289 other information services to its clients during this period.

Local superintendents and their central office staff made five times as many requests in FY 81 as in FY 76.

Topics on which research was requested reflected important concerns of contemporary education. Basic skills, handicapped students, and instructional strategies were the three problem areas in which the most requests were received.

Clients reported having used the information for program planning and improvement more often than for any other purpose.

Typical users estimated that it would have taken 28 hours to research the topic themselves and locate the information included in their research packet, while the average EIC staff time required to prepare a research packet, including both professional and clerical work, was 6.8 hours.

One of the most important functions of the EIC research staff is to screen documents for relevance and utility. Only about 20% of the materials reviewed were sent to the client.

The average turnaround time on research packets--from request to mail-out--was 8.7 working days.

EIC users, in evaluating the research packets received, reported that the topic coverage was very good, that the amount of information was about right, and that the packet arrived in time for their purposes.

Overall, users reported that access to EIC research services is very useful to their professional functioning.

Client evaluation of EIC services has been so uniformly favorable over the years that we have not been able to find any statistically significant relationship between client satisfaction variables and search level, turnaround time, or other packet preparation variables.

We have, however, been able to document a very significant difference between the amount of time clients typically report having saved by receiving an EIC research packet and the amount of EIC staff time required to prepare it. In the latest analysis, clients reported having saved an average of 28 hours of their own time per search, while the average packet preparation time was just under seven hours. These data form

the basis for a cost-benefit analysis which demonstrates that the value of consultant time saved last year exceeded the total cost of operating the EIC by almost $75,000.

COST-BENEFIT ANALYSIS

COST:

TOTAL EIC PERSONNEL AND OPERATING COSTS IN FY 81	$ 170,000.

BENEFIT:

472 LEVEL 2-5 SEARCHES X 28 HRS. AVE. TIME REPORTED SAVED PER SEARCH	13,216 HRS.
174 LEVEL 1 SEARCHES X 4 HRS. AVE. TIME ESTIMATED SAVED PER SEARCH	696 HRS.
TOTAL ADMINISTRATOR/CONSULTANT TIME REPORTED SAVED BY USING EIC	13,912 HRS.
ESTIMATED VALUE OF EACH ADMINISTRATOR/CONSULTANT HOUR	$ 19.
VALUE OF ADMINISTRATOR/CONSULTANT TIME REPORTED SAVED BY USING EIC	$ 264,328.

In 1980, a study was undertaken to assess the ultimate impact of EIC information services on educational practice in Georgia. Its purpose was to examine and document information applications at various levels of the educational enterprise, and to develop case histories of actual changes or improvements that could be related to the EIC information services. An instrument was developed and sent to some 500 requesters who had received research packets in 1977-79. The results of this survey are discussed in detail in the section on impact.

C. Leadership/Coordination

When the project began in July 1976, the department had about 800 members, approximately 150 of whom were assigned to provide technical assistance in educational programs, management, or support services to local systems. (Most of the others were administrators or teachers in special schools for handicapped, or in vocational-technical postsecondary schools administered directly by the department through the Office of State Schools and Special Services.)

The technical assistance personnel were primarily assigned to the three other offices, each headed by an associate superintendent for Administrative Services, Instructional Services, or Adult and Vocational Education. The project was located in the Division of Planning, Research and Evaluation, in the Office of Administrative Services. The State Superintendent of Schools at the time was Dr. Jack P. Nix, chairman of the Council of Chief State School Officers and a veteran chief state school officer.

Technical assistance to local systems was given by specialists in a curriculum area or in a particular ancillary service or management function. Although most curriculum specialists were in the Office of Instructional Services or Vocational Education, their services were offered by program or subject area, and there was little coordination among them. One of their major functions was the dissemination of improved practices in education, but these efforts were fragmented.

The project's plans and expectations for improving coordination were based on a concept of team consultation by department staff to assist local systems engaged in a comprehensive planning process. Local comprehensive planning was an innovative concept in Georgia and was being piloted in five school systems at that time. The expectation was that the extension of comprehensive planning to more systems would make coordinated technical assistance essential, and that this would be provided by teams of consultants brought together from various offices and divisions of the department.

The success of the five pilot projects resulted in an expanded program involving 19 additional school systems in a multi-year planning effort. The 19 planning grants emphasized locally-designed program planning that would address the school system's education program in its entirety. As the 19 projects got underway, the 1977 session of the Georgia General Assembly passed the Demonstration School System Act as an amendment to the basic education law. It authorized the State Board of Education to waive regulations on school systems which had an approved comprehensive plan, if such waivers should be necessary in order for the school system to fully implement its plan. An emphasis by department staff and by local school systems on such an approach to school improvement would necessarily require a substantial increase in information services of the type offered by the Education Information Center. It was also anticipated that the effort would encourage middle management to cooperate more fully in efforts to coordinate the various dissemination and program improvement activities of the department.

The stage was set for initial coordination efforts within the Office of Administrative Services. An advisory group was established to: (1) define the role of staff in the Office of Administrative Services who worked directly with local systems; (2) develop office objectives for working with local systems; (3) develop objectives for dissemination and diffusion; and (4) determine the training needs of office staff to fulfill the roles and meet the objectives. The first meeting of the advisory committee led to an expansion of the group's membership. In addition to the original members, consisting of the office head, division directors, and capacity-building project managers, the group was augmented with managers responsible for major office functions that linked the Office of Administrative Services to local school systems. Additional members included the section heads for Planning, School Food Service, School Plant (facilities) Service, Publications and Information, Financial Review, and School Standards. The advisory committee worked through a role analysis that prompted the Office of Administrative Services to shift its emphasis more in the direction of local school systems assistance and support with less emphasis on regulatory enforcement. Overall, the developmental efforts within the office began to involve a greater variety of staff across division lines.

Across office lines, greater participation and coordination was taking place through ad hoc collaborative activities, as evidenced by:

1. increased participation of department and CESA curriculum consultants in Title IV-c developmental and adoption/adaptation projects;

2. participation of department consultants for reading, math, and career education in the NIE-Supported Research and Development Utilization (RDU) project;

3. coordination of RDU and Title IV-c grants in specific CESAs in order to make planning and implementation of adoption/adaptation projects more effective;

4. cooperation of curriculum consultants with the Education Information Center (EIC) in compiling lists of promising practices in Georgia;

5. cooperation of the EIC with the Publications and Information section in disseminating information about promising practices more widely;

6. cooperation of the RDU resources specialist with the EIC in gathering information about validated programs;

7. consistent recommendation to Title IV-c applicants to the EIC as a planning resource;

8. use of EIC services by all committees of the State Career Education Task Force in preparing career education resource guides;

9. cooperation of the Division of Public Library Services (PLS) and the EIC in acquisitions, resources, and services.

In August, 1977, Superintendent Nix resigned. With the appointment of Dr. Charles McDaniel to fill the unexpired term, the department staff found itself in a period of flux as the new superintendent examined the department and its staff within the context of his goals and priorities for education over the next decade. Little could be done to formally restructure dissemination activities because department staff's attention was focused on how the department was to be reshaped, what changes in philosophy and operating styles were necessary, and who the influential decision-makers would be. The viability of local comprehensive planning was in question and no additional planning grants were provided for school systems to develop a single comprehensive plan for consideration by the State Board. One of the original five school systems, Lanier County Schools, sought and obtained Demonstration School status, but none of the other 186 school systems has made application. With the demise of the local school systems comprehensive planning thrust, the major rationale for the department team approach was eliminated. However, the Office of Instructional Services has moved to convert many of its curriculum and program specialists to more generalized roles. As generalists, the individuals frequently call on others with needed specialties to help individual school systems with particular problems, in a team approach.

The current situation with respect to the department's dissemination function is characterized by four rather independent groups serving a broad range of clients in the area of general education (including both compensatory and special education), vocational education, program support services (including fiscal procedures, facilities, nutrition, and transportation assistance), and special developmental areas such as staff development and competency-based education. (Coordination of assistance to local school systems is managed at the office level with ad hoc arrangements made for efforts that involve two or more offices. Coordination at this level has been encouraged by the work of a ten-member committee which examined the nature of department dissemination efforts vis-a-vis local school systems. The committee also studied ways to structure the education programs in order to plan for improvement of such efforts. The committee, which operated during the winter and spring of 1980, was chaired by the current capacity-building project director and was comprised of department staff responsible for or concerned with curriculum development, instructional media, program improvement, vocational education, school administration, and program support services. The assessment of assistance efforts was carried out by members of the committee and played an important role in the examination of alternative program structures. During the following school year, a major effort was undertaken by department staff to prepare a plan for education at the state level. The preparatory work done by the committee was useful in these planning activities and made individual committee members better able to assist in the development of the first state plan for education in Georgia.

The net result is that while improvements can be seen in informal coordination across division and office lines, little change has been made formally. One might conclude from the Georgia experience, that formal coordination along functional lines in a very large department

where many staff are involved in dissemination activities, is nearly impossible and perhaps undesirable. Coordination efforts of the Georgia department continue to be directed along programmatic rather than functional lines.

On a more informal level, a great deal of collaboration between the project and other department programs and activities has occurred, and some ongoing coordination of effort has been estalbished.

The EIC maintains the same stance vis-a-vis potential department users of its services as with other EIC clients, that is, to provide them support in pursuing their own objectives. Department consultants, like other clients who play a technical assistance role, serve as knowledge linkers in their area of expertise. They work with systems to solve both system-level and school-level problems. New federal and state mandates for change sometimes challenge the limits of their expertise, causing a need for information about issues, programs, materials or research. The EIC has become a resource which many department staff members now turn to when a new problem arises. The EIC document analysis and selection service developed through the project makes it possible for department staff to use their limited time in reviewing the more relevant material and developing ways to apply it.

Research requests from department staff have nearly doubled over the last five years. Utilization by various divisions has fluctuated from year to year, partially, perhaps, because of physical proximity - to the center. When the EIC was located in the same building with the department's curriculum consultants, more requests were received from them. The only consultant group located in that building which now places more requests than before is in exceptional child education. Nevertheless, requests are received from virtually all program areas.

As might be expected, consultants involved in developmental projects tend to have greater information needs and to encourage the local educators they work with to request EIC services. The Title IV-c staff has consistently advised local systems to request an EIC search prior to writing a proposal.

The EIC has provided some of the basic information for the development of department curriculum guides, basic skills continuums, career education resource guides, and publications about educational media. Cooperation between the project and the department's Division of Publications and Information made possible the distribution of the department's NewsTip sheet to every public school in the state. Collaboration between this project and the Georgia RDU project has already been described.

Ongoing resource sharing has been established between the Division of Public Library Services and the EIC. EIC staff make almost daily use of the PLS document collection and in turn does ERIC searches for PLS staff and provides them with microfiche duplicates.

Project staff have worked with other department members in many ways over these five years, for example, on the SDE planning committee, the Governor's Task Force on Education, the career education task force, the competency-based education advisory group, the study skills committee, the equal employment opportunity advisory group, the information dissemination policy committee, and various proposal review teams.

In sum, the EIC has become an integral part of the department, is habitually used by many SDE staff, and is viewed as an essential element in the professional functioning and professional development of many SDE administrators and consultants.

II. Comparison of Program Status prior to and upon Completion of Project

Prior to Project (FY 76)	After Project (FY 81 and beyond)
Resources	
EIC had only two levels of research service.	EIC has five levels of research service, including search-in-depth.
Document screening, review, analysis, and selection rarely provided as part of research service.	EIC staff reviewed over 50,000 documents in FY 81, and selected only 20 percent of them for inclusion in research packets.
Typical EIC research packet included only an ERIC printout.	Typical packet includes computer printout, five document reprints, four documents on microfiche, and one document loan.
EIC possessed poor collection of original documents, badly cataloged.	EIC has acquired 2000 documents on topics of client concern, each cataloged with 5-20 ERIC descriptors.
Little use by EIC staff of information resources located elsewhere.	Heavy use by staff of libraries at Georgia State University and in Division of Public Library Services.
No way to efficiently match local system characteristics and needs with appropriate validated projects, or to use materials from those projects for other purposes.	Efficient validated programs retrieval system developed, implemented, and provided to every CESA.
Georgia SDE documents rarely submitted to ERIC.	EIC serves as clearinghouse for regular submission of SDE documents.

Prior to Project (FY 76)	After Project (FY 81 and beyond)
Linkage	
EIC staff consisted of 1½ professionals and a secretary, all on Title V funding.	EIC staff of seven professionals, a secretary, and a student assistant, all but two on state funds.
Few efforts made to publicize or extend EIC services.	Awareness brochure, slide-tape presentation, orientation packets, and orientation presentations used to stimulate EIC use.
EIC received 255 research requests.	EIC received 646 research requests in FY 81.
SDE staff most frequent requesters of EIC research services.	Local educators most frequent requesters.
Local educators made 49 research requests to EIC.	Local educators made 242 research requests in FY 81.
EIC provided other materials or assistance on 895 occasions.	EIC provided other materials or assistance on 1,543 occasions in FY 81.
Little EIC service provided to Georgia Learning Resources System (GLRS) centers.	GLRS centers eligible for and regular users of all EIC services.
No linker training provided by EIC.	Numerous staff development activities provided to resource base staff and to linkers in CESAs and SDE.
Leadership	
No formal evaluation of EIC.	Management information, client satisfaction, and project impact data collected, analyzed and reported to top management.

Prior to Project	After Project (FY 81 and beyond)
Leadership, cont.	
No information available on cost-effectiveness of EIC services.	Systematic data collection shows that value of client time saved through use of EIC research services exceeds cost of operating EIC.
No information gathered on use of information provided by EIC.	Clients report using information most often for program planning and improvement.
No assessment made of impact of EIC research service.	44% of clients report that information provided produced recognizable change in classroom practice.

III. Institutionalization

The major concern over the last eighteen months has been to insure the continuation and growth of the information services that have been developed and expanded through SCB funding and made available by the State Department through the Education Information Center.

Although the EIC had been in existence for three years prior to the project, it had a small staff of only one and a half full-time professionals and a secretary, all of whom were supported by ESEA Title V state leadership funds.

Over the project years, the staff had grown to nine: an EIC coordinator, two senior research specialists, two research specialists, two library assistants, a secretary, and a VOT student assistant. In 1980, the coordinator was transferred to state funds. A senior research specialist and the EIC secretary remained on state leadership funds. The six other positions were to be terminated at the end of the project if alternative funding sources were not found.

We had attempted to convert two of these positions to state funding in 1979-80. The State Board of Education included the request in its funding request to the Governor and the General Assembly, but it was not included in the appropriations act. Therefore, success in achieving state funding in the 1981 legislative session was imperative.

Prior to the 1981 session, the State Board, State Superintendent of Schools Charles McDaniel, and Governor George Busbee recommended to the General Assembly that the full cost of funding the EIC be assumed by the state on July 1, 1981. Five new state positions (all but the VOT student) were requested, with a total funding request of $94,942.

The General Assembly met from mid-January to mid-March. Top SDE funding priorities were a substantial pay raise for teachers and an increase in the Maintenance and Operations allocation to counterbalance the effects of inflation. Whether these or other improvement requests, including the EIC, could be funded, and at what level, depended largely on the outcome of a dispute between the House and Senate over whether certain capital improvements should be financed by cash outlay or bonds. Also prevailing at this session was a decidedly negative attitude against any automatic assumption of activity previously federally-funded unless there was strong evidence that it was effective.

About mid-February, when the House turned to a consideration of the Governor's proposed FY 82 budget, it became apparent that the EIC was in trouble, perhaps because the appropriations bill characterized the request as providing for "state assumption of 5 positions...and operating expenses in the Education Information Center currently funded with a grant from the National Institute of Education (federal)." At a time when the new federal administration was dealing with massive economic problems and state government was being doubly careful not to appropriate its limited funds unwisely, it was clear that special efforts were needed to get EIC continuation considered on its merit, and not just as a request based on previously

received federal funds. Within this context, permission was given to contact EIC users about the effectiveness of the EIC and the impact of a virtual elimination of EIC services on their local program improvement efforts.

The EIC funding request was zeroed out by the House, put back in (in full) by the Senate, and finally reduced to $40,000 by the Joint Senate House conference committee. The issue of cash outlay or bonds was settled more on the side of paying cash for capital improvements. If it had gone the other way, the EIC would probably have been fully funded.

While disappointed at receiving less than half the requested amount, we were relieved to have survived, given the attitude of the General Assembly toward funding new positions in state government. Out of 64 new state-funded positions requested by the department, only seven were approved, and three of these were in the EIC.

Since the final authorization in the appropriations bill was for three positions rather than five, and since we felt it essential to maintain the entire staff in order to insure the quality and quantity of research services being provided, we began working to find sources of the additional $55,000. We compiled a list of about eight possibilities, the least desirable of which was to assess user fees, and began working on them in the order of descending preference over the next six months. (We had obtained a no-cost extension of the project which carried it through September 1981.)

Since at least eight percent of EIC work was being done on problems which were demonstrably Title I-related, and about eighteen percent was on special education problems, we first approached the Associate State Superintendent and division director responsible for these programs. After a period of negotiation, they agreed to a one-time transfer of $20,000 in Title I and Title VI-b funds to the EIC. Unfortunately, both these programs were being audited and the department's budget officer determined that this might be construed as an illegal application of the funds, so the request to transfer the funds had to be withdrawn. A later effort to negotiate the extension of EIC services to the state's psychoeducational centers was unsuccessful for the same reason.

We then negotiated with vocational education for program development funds in return for a service extension to postsecondary vocational schools, but this was unsuccessful also.

In the meantime, we had decided that the three new authorized positions had to be used to maintain the three research specialist positions. They could be continued throughout FY 82 on a combination of SCB funds, new state money, and a supplement from the department. This left the library assistants and the VOT student to be funded.

In July, a secretarial position in the Research and Evaluation Section became vacant. An assessment of the clerical workload of the

section and the Division of Planning, Research and Evaluation established that the state authorization and funding could be used to support the senior of the EIC's two library assistants. The other library assistant position was lost when the project ended on September 30. The VOT position was unfunded until recently, when $2,000 in Title IV leadership money was allocated for it.

Considering the difficulty of transferring federal projects to state funding this year, we feel that without the strong support and assistance of EIC clients statewide, the EIC would not exist now. This support is probably the best measure of the value that EIC services have come to have for many Georgia educators.

Presently, then, there are five staff positions in the EIC funded by the state, and two staff positions and a VOT student funded by Title IV leadership funds, for a total of $110,966 in state and $43,312 in federal funds. Operating costs in FY 82 of $33,978 are being paid with a combination of state and federal funds.

IV. Equity

Information resources to improve educational equity have been developed by two Atlanta-based projects supported by the EIC. One, Project ServE, was designed to help educationally disadvantaged students throughout the state have successful vocational education experiences. The Education Information Center did two very lengthy searches of ERIC and AIM/ARM to help project staff locate all available materials appropriate for use in developing a compendium of resources for vocational educators implementing programs for this large target group.

A second equity-related effort, in the department's Office of Vocational Education, was Project Explore. It focused on postsecondary CETA students, aiming to expand recruitment and enrollment of students into nontraditional careers and to help sponsoring agencies with curriculum and staff development. The EIC assisted the project coordinator to review the literature in nontraditional vocational education, so that materials developed by the project would build on, instead of recapitulating, previous work.

The EIC also did a series of searches for the CETA training coordinator at Metro CESA on aspects of successful CETA programs, from teacher selection and training to student placement.

During the last year of the project, approximately eight percent of requests were specifically for Title I efforts. Many more addressed problems in the related areas of compensatory and remedial education. Several proposals prepared by rural systems to try to secure funding for programs for the disadvantaged gifted were supported by EIC research.

The heaviest use of the EIC by an urban system is in the Atlanta (city) public schools, where approximately 91 percent of students are of a minority race. Some of their requests over the last year related to training tutors for remedial reading programs, instructional time in reading and math, and student safety going to and from school.

Within the department, the EIC made a special effort to acquire documents related to race and sex equity, and department staff responsible for these areas have probably received more current awareness material from the EIC than any other group. These six administrators and consultants received ERIC document resumes, newsletter items, publication announcements, or document loans on 55 occasions in the last year of the project.

Early in the project, the EIC staff assisted the RDU project in preparing and editing their sex equity document.

Also early in the project, the Georgia Learning Resources System (GLRS) directors were formally added to the list of those eligible for direct EIC services. Through them, teachers of the handicapped throughout Georgia may access EIC resources and services.

One of the project's first major accomplishments was to assist Thomas County in obtaining a grant of $59,000 from the National Science Foundation to produce a series of slide-tapes designed to encourage handicapped people to consider scientific careers.

P.L. 94-142 has fostered a large increase in the proportion of EIC research requests on topics related to the handicapped. In FY 81, 18 percent of all research packets dealt with problems in this area.

Perhaps the project's major educational equity accomplishment has been to improve access to information resources of educators in Georgia's many rural school systems. Approximately 40 percent of Georgia's public school students are educated in small rural systems with an ADA less than 5000. Some 70 percent of the students in rural systems are educationally disadvantaged and 42 percent are of a minority race.

The size of most rural systems makes it impossible for them to employ many consultants. System-level problems must be solved by a small (sometimes no more than one or two) central office staff. Adequate information resources are often miles away in the nearest college town. For these reasons--the number of disadvantaged or minority race children in rural schools and the inaccessibility of information resources--the project has concentrated its efforts to promote greater use of EIC services in rural systems and the intermediate agencies serving them.

An analysis of 676 research requests handled by the EIC in the final year of the project shows that 274 came from rural systems or CESAs, a 175 percent increase compared to the year before the project began. Currently, about 40 percent of EIC research service utilization originates in non-urban systems or CESAs. This means that the degree of utilization by rural systems is about equal to proportion of the total student population they serve.

Most of the examples of specific project impact described in the next section occurred in rural areas.

V. Impact of the Program on Improvement of Practice

In Spring 1980, as we approached the beginning of a renewed effort to achieve state funding of the EIC, we needed documented information about the impact of EIC services on various levels of educational practice in Georgia. We knew that EIC clients report satisfaction with their research packet a month after having received it. We knew the types of applications that they intended to make of the information. And we had occasional informal reports of what had resulted from applying the information "in the real world," but we had not attempted systematically to gather evidence about the subsequent impact.

In April 1980, therefore, we designed a questionnaire and sent it to the requesters of more than 500 research packets which had been sent out during a two-year period from 1977-79. (This insured that at least a year had passed since the information was received.)

We wanted to develop and present to the State Board a few case histories and to cite briefly specific examples of change that had occurred in each of Georgia's ten congressional districts.

We were also concerned about gathering data on three possible ways in which the information might have been used by the requester or his/her agency, i.e.,

1) to make a decision to make a change.
2) to make a decision not to make a change, or
3) to implement a change that had already been decided upon.

Finally, we wished to know whether clients believed that using the information had resulted in a recognizable change in classroom practice.

The questionnaires were sent out in May, obviously catching local and CESA requesters in the midst of end-of-school activities. The return rate was 53 percent, with a total of 275 of 519 questionnaires returned.

The following indicates the questions asked and the responses to each. The percentage given in parentheses represents a "worst case" figure, which assumes that nonrespondents failed to return questionnaires because they judged that the information received had had no impact on educational practice. The other percentage is the proportion of respondents who checked a particular answer.

1. To what extent did the information received influence a decision to make a change

   ---in a classroom-level practice?

"Substantially"	16%	(8%)
"Moderately"	20%	(10%)
"Somewhat"	17%	(9%)
"Not at all"	20%	
"Don't remember"	5%	
No response	22%	

---in a school-level practice?

"Substantially"	16%	(8%)
"Moderately"	16%	(8%)
"Somewhat"	20%	(10%)
"Not at all"	18%	
"Don't remember"	5%	
No response	24%	

---in a system-level practice?

"Substantially"	18%	(9%)
"Moderately"	17%	(9%)
"Somewhat"	21%	(11%)
"Not at all"	18%	
"Don't remember"	5%	
No response	21%	

---in a CESA-level practice?

"Substantially"	21%	(11%)
"Moderately"	17%	(9%)
"Somewhat"	12%	(6%)
"Not at all"	25%	
"Don't remember"	3%	
No response	22%	

2. To what extent did the information influence a decision <u>NOT to make a change</u>?

"Substantially"	5%	(3%)
"Moderately"	2%	(1%)
"Somewhat"	6%	(3%)
"Not at all"	46%	
"Don't remember"	6%	
No response	33%	

3. After a decision had been made to go ahead with a new activity or practice, such as a program adoption, workshop, proposal, program evaluation, management practice, etc., to what extent did the information help in <u>developing or implementing the activity or practice</u>?

"Substantially"	32%	(16%)
"Moderately"	13%	(7%)
"Somewhat"	17%	(9%)
"Not at all"	7%	
"Don't remember"	8%	
No response	21%	

4. Did the information received ultimately have a recognizable effect on classroom practice?

"Yes"	44%	(22%)
"No"	27%	
No response	26%	

Considering the many intervening variables which may interact to facilitate or prevent change in educational practice, it is remarkable that as many as 44% of the respondents felt that the information received had recognizably affected classrooms.

The following are three case histories which were subsequently developed based on client responses to the questionnaire.

* * * * * * * * * * * *

In Bibb County, the Director for Exceptional Children felt that their program for gifted elementary school students needed improvement. He decided that a formal evaluation should be conducted to verify this and to determine how the program should be improved. He requested a research packet on evaluating programs for gifted students. Using the material received from the EIC, a committee of twenty people designed five different evaluation forms: one for parents, students, principals, regular teachers, and teachers of the gifted. Using sampling techniques suggested in the literature, over 1000 people were selected to receive the questionnaires.

As a result of the information collected by the questionnaires, Bibb County has already made significant program changes, including increasing the amount of time that students spend in the program, designing a system for reporting student progress to their parents, and giving an inservice program for regular teachers of the gifted. They plan to change to a learning center approach next year and to do some curriculum revision, as well. The EIC is currently doing searches for them on both of these topics.

The original search required five hours of EIC staff time. The requester reported having saved 10-16 hours of his own time by using the research service.

* * * * * * * * * * * *

In Early County, a local needs assessment indicated the need for improvement in their elementary school mathematics program. Over a period of a year and a half, the curriculum director requested four searches from the EIC relating to the impact of teaching competencies, teacher supervision, school climate, and principal's behavior on student achievement. One of the major factors identified in the research was that teacher behavior which increases on-task activity by students leads to increased student achievement. (The information also provided back-up for a successful Title IV application requesting developmental funds for a new math program.)

Prior to beginning the new program, the lead people in the system were trained to observe teacher behavior using the Teacher Performance Assessment Instruments. Principals, in particular, were given a lot of training in observing teachers and classrooms; then systematic observations of classrooms were made to determine the amount of student on-task activity before the new program began. As the implementation progressed, more observations were made and data was collected to determine whether anything was changing. The data showed a significant increase in on-task activity by teachers and students.

Between 1978 and 1980, fourth-graders' achievement on the criterion-referenced math test improved significantly. In 1978, 66% of students had mastered all 20 CRT objectives. By 1980, 84% of the students achieved all 20 objectives. This improvement is attributed by the curriculum director largely to increased and improved supervision by principals, which led to more on-task activity in classrooms.

* * * * * * * * * * * *

In Morgan County, the principal and faculty of the high school agreed that the quarter system was not working well for some students because of an inadequate advisement system. One remedy they had discussed was an individual advisement system, in which each faculty member would have a group of students to advise on an individual basis. The principal opposed this idea because he did not believe that research had shown its effectiveness or workability.

The CESA consultant in their area requested an EIC search on individual advisement of students by teachers. The research packet included a study which persuaded the principal that the idea was potentially workable and effective. In addition, using other materials in the packet, the CESA consultant was able to prepare and give an inservice program for faculty members to teach them how to change from a teaching role to an advisor role, in order to be as effective as possible in the new approach. The packet also suggested a way to arrange for teacher release time so that they could participate in the staff development activity during school hours, and assisted him in evaluating the inservice program. It also suggested a way, which has been adopted, to assign students to faculty members.

According to this CESA consultant, the new approach to student advisement is working well and, as an additional benefit, will also provide the career education component of the competency-based high school graduation requirements.

* * * * * * * * * * * *

Here are additional brief examples of EIC research service impact. As may readily be seen, they vary from affecting one child to affecting an entire CESA region.

Coffee County determined how to fit a new junior high school building onto an odd-shaped piece of land.

Grady County decided to develop a program to serve their hearing-impaired students locally, saving students an hour extra on the bus every day.

Pelham City developed new teacher evaluation forms and procedures.

Dougherty County developed a policy to extend the school day in grades 1-3.

Harris County was provided with information on several environmental education projects which helped them select the best one for their needs.

DeKalb County changed the design of their IEP for gifted students and greatly increased the input from students and parents in the IEP development process.

Fulton County planned and implemented new foreign language course guides based on individualized skill and concept development.

Pike County developed a handbook for parent-tutors who participate in ESEA and Right-to-Read efforts. The Director of Secondary Education says that this tutorial program has increased parents' understanding of the school program and promoted good will between school and community.

In Chattahoochee-Flint CESA, procedural guidelines for P. L. 94-142 were developed which improved referral and placement of handicapped children.

West Georgia CESA developed several volunteer programs in the schools in their area.

A consultant in Northwest Georgia CESA was able to counsel with parents of a child who has Conradi syndrome and suggest home-based activities.

A Northeast Georgia CESA consultant received information which helped her prepare and give a training program for teacher aides. This led to their assisting teachers more effectively in reading instruction.

Bibb County developed a procedure for awarding high school credit for community-based learning.

The local board in Barrow County modified their policies and school practices re corporal punishment, teacher leave, and teacher evaluation.

A psychometrist in Heart of Georgia CESA was able to evaluate several adaptive behavior scales and select the one to incorporate into their battery of tests used to identify students eligible for special services under P. L. 94-142.

In Central Savannah River CESA, research had been requested to support an application for federal funding for a teacher center. The project was not funded, but the local system liked the idea so well that they developed a teacher center with local funds.

* * * * * * * * * * * *

The following section is the Annual Project Report on Estimated Impact of Project Activities. The reader should note that since our impact study was completed over a year ago, most of our responses are based on the assumption that research packets continue to have a beneficial impact on the problem which they address, and therefore reflect relevant problem areas in which research has been requested over the last year.

National Institute of Education

Regional Program

ANNUAL PROJECT REPORT ON ESTIMATED IMPACT OF PROJECT ACTIVITIES

Title of Project Georgia Dissemination Capacity-Building Project

Project Director Dr. Jess P. Elliott

Date: Report covers 10/1/80 - 9/30/81

INSTRUCTIONS

Column I: Please give your best estimate of the numbers of people in each category who have been direct users of your services in the past year (or three project quarters). A direct user is identified as the person for whom the service was intended. For example, if a principal or school clerk calls with a request for information for a district administrator, the information would be put in the category of "district personnel."

Column II: Briefly describe the kinds of services that were provided to each group i.e., information packets, workshops, consultations on new programs, etc. Be as specific as your current record keeping will permit.

Please submit these forms to your project officer.

	No. of Direct Users (Est.)	Kinds of Services Provided
Teachers		Ineligible for direct services.
School Bldg. Administrators		Ineligible for direct services.
District Personnel		- 252 research requests-EIC research packets - 135 other materials-Current awareness information, micro- or assistance fiche duplicates, EIC orientations.
Intermediate Unit Personnel		- 198 research requests-EIC research packets - 191 other materials - Current awareness information, micro- or assistance fiche duplication, EIC awareness materials, document loans.
SEA Personnel -Chief and Admin. Staff -Other		- 32 194 -226 research projects-EIC research packets -1,162 other materials -Current awareness materials, document or assistance loans, EIC brochures.
School Boards		Ineligible for direct services.
State Legislators		Ineligible for direct services.
Parents		Ineligible for direct services.
Students		Ineligible for direct services.
Others (Name) Miscellaneous others who are not eligible for EIC services, e.g., college students		- 57 other materials - ERIC orientation; referrals to other or assistance computer search service; on-site personal use of EIC document collection; referrals to other sources of the information sought; clarification of EIC service policy, etc.

Relationship of NIE Priorities to Project Activities

NIE is interested in collecting information (anecdotal or quantitative) on the ways in which our funded projects have made a difference for educational practitioners and decision makers. Please describe any project activities or accomplishments during the past year that relate to the seven priorities below outlined in NIE's authorizing legislation. If there are no activities within any priority category, please leave it blank. Otherwise, describe the activity with a focus on "outcomes" or project contributions toward the priority.

The following reflect topics of research packets prepared over the last year and the purpose for which they were requested.

(A) improvement in student achievement in the basic educational skills, including reading and mathematics

- Scoring and grading students' writing samples - local system initiating writing assessment program.
- Series of searches related to mastery learning for local superintendent - helped them write a proposal for funding and begin implementing mastery learning.
- Use of CRT results by language arts teachers - local language arts coordinator helping teachers diagnose students' instructional needs using the test results.
- Spelling textbook evaluation - CESA consultant helping local systems make most appropriate selection from state textbook lists.
- Numerous searches done on alternative education, e.g., magnet schools - to increase students' educational options, improve learning and keep students in school.
- Activities for teaching reading in math classes - CESA consultant working with math teachers to help them reinforce reading skills.
- Numerous searches on learning style - usually to assist CESA consultants to provide inservice for beginning teachers deficient in this area.
- Math instruction in grades K-3 - local math consultant developing inservice program for primary grade teachers.
- Diagnostic and prescriptive teaching - CESA consultant giving series of workshops for teachers.
- Instructional time and classroom management in reading and math (K-4) - local consultant writing a proposal for NIE funding to improve local practice.
- Reading programs for gifted (K-3) - local superintendent in very small rural system trying to improve same.
- High interest, simple vocabulary reading materials - CESA consultant developing a bibliography to give to teachers.
- Games to use in teaching elementary reading skills - CESA consultant doing teacher inservice in five counties.

(B) overcoming problems of finance, productivity, and management in educational institutions;

- Assessing effectiveness of central office staff utilization - to assist a new superintendent use his staff more effectively.
- Half-day vs. full-day kindergarten - building a rationale for legislative funding of full-day kindergarten.
- Several searches on reduction in force in local systems - for administrators trying to develop a plan for same.
- Several searches on teacher advisement systems - improving implementation of competency-based graduation requirements without hiring additional counselors.
- Substitute teachers - to assist several CESA and local consultants provide staff development for substitutes to improve their effectiveness.
- Delivery systems for special education - to help a CESA consultant help small rural systems assess their own delivery system and improve it.
- Numerous searches on administrator evaluation, from principals through central office staff - for local systems developing evaluation processes.
- Several searches on methods of state financing of public education - related to court case in Georgia Supreme Court.
- Numerous searches on time management by teachers and administrators - usually used for staff development programs to improve same.

(C) improving the ability of schools to meet their responsibilities to provide equal educational opportunities for students of limited English-speaking ability, women, and students who are socially, economically, or educationally disadvantaged;

- Numerous searches on mainstreaming, especially vis-a-vis changing teachers' attitudes - to help consultants ameliorate teachers' negative attitudes and to improve instruction.
- Resource rooms for mildly handicapped students - to improve a resource center already in operation.
- Assessing staff development needs of special education personnel - Metro area GLRS beginning a three-year project to improve special education teachers.
- Parental involvement in Title I advisory councils - local system trying to improve functioning of same.
- School programs for single parents and their children - local system trying to develop a better support system for and better communication with single parents.
- Instructional strategies for slow learners - many searches have been done on this topic, usually to help CESA consultants assist local systems in improvement.
- Several searches done on alternatives to suspension/expulsion - to decrease dropouts and keep students in school learning instead of being on the street.
- Curriculum and instruction for mentally handicapped offenders - Department of Offender Rehabilitation trying to improve educational program for incarcerated individuals in this group.

(D) preparation of youths and adults for entering and progressing in careers;

- CETA program evaluation and client evaluation and placement - improving CETA training progra
- Career education for ninth grade girls - to improve local program in a very small rural system.
- Task analyses for high tech. machine tool operation - department developing individualized instructional program.
- Career ed. for the mildly retarded secondary student - local consultant trying to improve program through teacher inservice.
- Postsecondary ed. opportunities for handicapped - CESA consultant helping guidance counselors work with parents of handicapped students.
- Numerous searches done for a department consultant working with a committee to develop resource guides for guidance counselors in postsecondary vocational schools.

(E) overcoming the special problems of the nontraditional student, including the older student (with special consideration for students over the age of 45) the part-time student, and the institution which the student attends:

- Recruiting students into nontraditional areas of vocational education - helping an administrator in a postsecondary vo-tech school improve same.
- Women in nontraditional secondary and postsecondary vocational programs)department
- Minority women in vocational education)consultants
- Curriculum, resources, programs for displaced homemakers)working on
)developing improve
)programs for these
)groups.
- Use of monetary rewards for academic component of vocational training programs - Metro area consultant examining methods of improving attendance of students in CETA training program.

(F) encouraging the study of language and cultures and addressing both national and international education concerns; and

- Course outline for first year Greek - local consultant planning to add Greek to curriculum in a large metro-area high school.
- Humanities in the middle and high school - department coordinator developing strategies for promoting humanities programs at these levels.

(G) improved dissemination of the results of, and knowledge gained from, educational research and development, including assistance to educational agencies and institutions in the application of such results and knowledge.

- Disseminating innovative projects - local dissemination specialist needing to develop effective dissemination products and processes for a validated project.
- Math labs for students in grades 7-8 - secondary curriculum director setting up a lab in a junior high school.
- Theoretical and research bases for middle school concept - local curriculum director wishing to persuade school board of need for organizational change.
- Effect on student achievement of grouping: by classroom or within classrooms - local assistant superintendent working on improving the achievement of students who have serious language deficits.

(These are only illustrative of the many research review packets requested by EIC clients during the last year.)

Final Report

Georgia Capacity-Building Project

APPENDIX

Georgia Department of Education

EDUCATION INFORMATION CENTER

Evaluation of Operations: 1979-81

Data Analysis by Dr. John Neel
Center for Educational Research
Georgia State University
August, 1981

Report Prepared by Dr. Anne Moughon
Education Information Center
Georgia Department of Education
November, 1981

EXECUTIVE SUMMARY

The Education Information Center (EIC) is a professional information support service for Georgia administrators and consultants. By providing knowledge of current research, programs, materials, and practices in education, the EIC gives professionals better access to information with which to approach decision-making and problem-solving.

Between April 1979 and March 1981, the EIC responded to 1,102 requests for research on job-related problems or issues. The information provided was shared by the original requesters with approximately 20,500 other people.

The EIC also provided 2,289 other information services to its clients during this period.

Local superintendents and their central office staff made five times as many requests in FY 81 as in FY 76.

Topics on which research was requested reflected important concerns of contemporary education. Basic skills, handicapped students, and instructional strategies were the three problem areas in which the most requests were received.

Clients reported having used the information for program planning and improvement more often than for any other purpose.

Typical users estimated that it would have taken 28 hours to research the topic themselves and locate the information included in their research packet.

The average EIC staff time required to prepare a research packet, including both professional and clerical work, was 6.8 hours.

One of the most important functions of the EIC research staff is to screen documents for relevance and utility. Only about 20% of the materials reviewed were sent to the client.

The average turnaround time on research packets--from request to mail-out--was 8.7 working days.

EIC users, in evaluating the research packets received, reported that the topic coverage was very good, that the amount of information was about right, and that the packet arrived in time for their purposes.

Overall, users reported that access to EIC research services is very useful to their professional functioning.

The Education Information Center (EIC) is a technical information retrieval and analysis service operated by the Georgia Department of Education for public school administrators and consultants. By providing information about current educational research, programs, materials, and practices, the Center assists professionals to broaden the base from which they approach job-related decisions and problems.

Underwritten by the department and the National Institute of Education Dissemination Capacity-Building program, the EIC has responded to some 2,545 requests for research on job-related problems over the last five years, and has provided its clients with more than 6,450 additional information services.

In the two-year period, April 1979 to March 1981, covered by this report, the EIC responded to 1,102 requests from 368 individual educators and--through requesters sharing the information--reached 20,500 additional Georgians.

Groups Served

The three primary user groups served by the EIC are local systems, intermediate agencies (CESAs), and the State Department of Education. Growth in demand for information services has been greatest at the local level. Since the beginning of the Capacity-Building Project, EIC usage by local administrators has increased from 49 requests in FY 76 to 242 requests in FY 81.

Educational consultants are the major users of EIC services; 92% of EIC information requests come from this group. 1,012 LEA, CESA, SDE, and GLRS consultant requests were handled by the EIC during the period covered by this report.

Table 1: Source of Requests

37%	Local Systems	(404 requests)
32%	State Department of Education	(358 requests)
31%	CESA/GLRS	(339 requests)

Approximately 12 percent of EIC research requests came from first-time users, the remainder being made by repeat users.

Topics Requested

Analysis of the topic areas in which research was requested indicates that the EIC is addressing central developmental and operational concerns. Basic skills improvement ranked high among topics about which many questions were raised. Problems related to the education of handicapped students were also frequently posed. Improving instructional staff was a topic of substantial interest, as administrators and consultants addressed questions related to accountability, teacher certification, and staff quality. Table 2 displays the eight areas of greatest user concern. (There is some overlap in the categories. For example, if the subject of a search was improving mathematics instructional strategies, it was counted in both the first and the third categories.)

Table 2: Topic Areas

Subject	Number of Requests
Basic Skills Improvement	145
Handicapped Students	120
Improving Instructional Strategies	112
Improving Instructional Staff	74
Student Evaluation or Testing	98
Community/Parent Involvement	65
Compensatory/Remedial Instruction	61
Career/Vocational Education	59

Information Utilization

Users apply the information received in EIC research packets in many ways. In their evaluation of the material they had received, they indicated the uses to which it had been put. The information was most often used in program planning or program improvement (225 requests). The next most frequent application was in staff development or inservice (163 requests). Making a decision on an educational issue (137) and preparing a proposal or report (124) were also frequent uses of the information.

Table 3 indicates the major categories of use and their corresponding frequencies.

Table 3: Research Packet Utilization

Use of Information	Number Reported	Percent*
Program Planning/Program Improvement	225	32
Inservice/Staff Development	163	23
Decision-Making	137	19
Proposal/Report	124	17
Presentation	85	12
Evaluation	43	6
Other	65	9

* Percents do not add to 100 because some clients report more than one type of use.

Research Packet Evaluation by Clients

Clients who receive research packets are sent an evaluation form 30 days later and are asked to evaluate the packet they received. The response rate of 79% is unusually high for a mail-out questionnaire.

Client responses to several of the items on the evaluation form are shown in Table 4. In every instance, the typical response was very favorable, with most clients marking the optimum response.

Most clients found it easy to explain their topic to the researcher taking their request. They rated the topic coverage as good to very good and the amount of information received as about right. The material arrived in time for their purposes 98% of the time. Two percent reported that it was late but still useful.

When clients were asked how useful the EIC is to their own professional functioning, most replied that it is very useful, with replies averaging 4.9 on a 5-point scale.

Table . Client Evaluation of Research Packets

Factor	Rating Scale	Mean	Mode
.Ease of Specifying Topic	5 (easy) - (average) - 1 (difficult)	4.75	5
.Topic Coverage	5 (very good) - 3 (average) - 1 (poor)	4.51	5
.Amount of Information	3 (too much) - 2 (about right) - 1 (too little)	1.97	2
.Arrival Time	3 (in time) - 2 (late but still useful) 1 (too late)	2.98	3
.Usefulness of EIC Services to Client's Professional Functioning	5 (very useful) - 3 (average) - 1 (negligible)	4.90	5

In summarizing their impression of the general usefulness or value of the information they have received, some 67% replied that it provided new ideas, while nearly half found additional alternatives for decision-making, 38% increased their awareness of problems to be met, and 40% formulated new questions or avenues of inquiry. Table 5 summarizes all responses.

Table 5: Value of Information to Client

%	
67	Provided new ideas
46	Provided additional alternatives for decision-making
38	Increased awareness of problems to be met
40	Helped formulate new questions or avenues of inquiry
62	Increased awareness of scope of material available
5	Other
1	Was of little or no help.

One of the best measures of client satisfaction is the extent to which they find the information provided by the EIC worth sharing with others. Clients reported during this period that they would be sharing the information they had received with 23 others, on the average. As this figure was derived from the responses of 698 clients, it is probably reliable for the group as a whole, which would mean that 20,500 others shared the information sent out in EIC research packets.

A second highly significant measure is the amount of their own time that clients report having saved as a result of using EIC services. The number of hours reported saved, averaged over 685 cases, was 28 hours per search packet. Generalizing this figure to all searches and, conservatively, allotting only four hours saved per specific document or author research (see explanation of search levels below), the total amount of administrator or consultant time saved by providing EIC research packets during this period was 21,394 hours.

The 28 hours reported saved contrasts sharply with the amount of time required by the EIC staff to prepare a research packet, which averaged 6.8 hours of staff time per search. Undoubtedly, the ready access to information which EIC staff members have, compared to the lack of access by educators in many rural areas, accounts for some of this difference, while EIC staff expertise in information retrieval and analysis probably accounts for the rest. EIC research services are thus seen to be cost-effective when measured solely by the difference between the amount of client time reported saved and the amount of staff time required to prepare each packet. This comparison does not take into account the value of the information's ultimate use. If this could be estimated, the cost-effectiveness of the service would come into sharper focus.

Finally, 98 percent of the clients indicated that the amount of information sent to them was "about right." In view of the fact that decision-makers report that information overload is frequently a major problem, the EIC staff's efforts in reviewing more than 40,000 documents and electing not to include about 80 percent of them in research packets appears to be of significant benefit.

Other Services

In addition to research packets, the EIC provides several other types of information services. These include: sending current awareness information (articles or items from current journals and newsletters) which relates to clients' job responsibilities; providing duplicates of ERIC microfiche in response to requests for specific documents; assisting Atlanta area students and other researchers to use EIC resources; furnishing information about information retrieval services to requesters who are ineligible for EIC service; and referring "ready reference" questions to an appropriate source in the department or an outside agency.

There were 2,289 such services provided by the EIC staff during the period covered by this report.

Research Packets

The EIC prepares research packets of varying levels of complexity, which have been categorized into five levels for analytical purposes:

Level I — Specific document or author search

Level II — Computer-generated, annotated bibliography of documents dealing with the requested topic

Level III — Computer-generated bibliography plus selected source documents

Level IV — Retrieval, analysis, and selection of the most relevant documents from all available sources (search-in-depth)

Level V — Generation of original information, or synthesis/summary of findings obtained through Level IV search.

Level I searches are the least complex of the EIC packets and involve the location and retrieval of one or more specific documents for which the client has a citation or partial information.

For a Level II search, the client explains an educational problem or issue about which more information is needed. An EIC researcher analyzes the problem, selects appropriate data bases, prepares computer search strategies, runs the search on the computer, and develops an annotated bibliography of relevant documents.

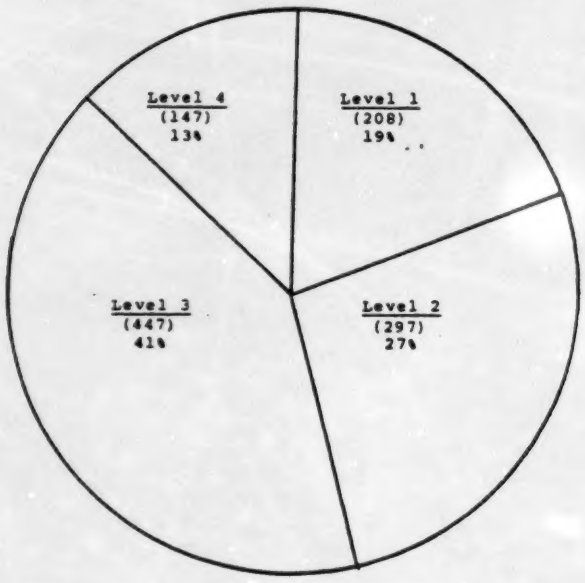
A lengthier and more analytical process is involved in preparing a Level III search, as it includes, in addition to the computer-generated bibliography, selected source documents, either partial or complete, which the researcher judges to be particularly relevant to the problem.

Level IV searches are searches-in-depth, in which most available sources of information are explored. This includes computer searches of all relevant data bases, searches of cooperating libraries, such as Georgia State University, and consultations with experts and other information analysis centers. It also includes searches of the EIC's own vertical files and document collection. The researcher reads and analyzes many documents before selecting and sending the ones that appear to be potentially most useful to the client.

The Level V search, rarely performed because it usually requires more staff time than is available, calls for the generation of original information, or a written synthesis of the information developed through a Level IV search. There were only three of these during the period.

Figure 1 shows the distribution of requests over the four major search levels.

Figure 1: Distribution of Search Requests Across Levels



Almost all requests result in the preparation of a research packet on the requested topic. Table 6 shows the various forms of information that may be included in a packet, the total number of each that was supplied, the average number per packet, and the proportion of packets that contained a particular form.

Table 6: Research Packet Contents

Form of Information	Total Number Supplied	Average No. Per Packet	Proportion of Packets Having
Computer-generated bibliographic citations	63,916	78	74%
Document reprints	5,580	9	56
Documents on microfiche	4,344	8	49
Document loans	777	3	24
EIC selected bibliographies	448	1	41
Consultant or site referrals	204	3	6

As seen in Table 6, not all research packets contained all forms of information. Only 6 percent included a consultant or site reference, while 56% contained one or more document reprints. If a packet included document reprints, the average number was nine. Generalizing across all packets, the average packet contained 58 bibliographic citations, 4 documents on microfiche, 5 document reprints, and 1 document on loan.

Educators who wish to update their knowledge and increase their alternatives for decision-making often face the problem of information overload. Since computer technology and large information data bases make it possible to locate tens or even hundreds of documents on a given topic, one of the most important functions of the EIC staff in responding to a client's information request is to screen and select documents for relevance and utility.

In preparing 594 Level III and IV searches during this period, the research staff reviewed 40,147 document resumes on printouts. A great many of these were also reviewed in full, either as complete journal articles or as ERIC documents reproduced on microfiche. In addition, many other potentially relevant documents from the EIC, Public Library Services, or Georgia State University collections were located and reviewed. From a total of well over 40,000 documents screened, researchers eliminated more than 30,000 that had insufficient relevance or merit to warrant the requester's time and attention. Only about 20% of the material reviewed is included in Level III and IV research packets sent out to clients.

Packet Preparation Time

The average response time, from request to mail-out, ranged from 2.4 working days (Level I) to 14.2 working days (Level IV). Level II packets required 7.1 working days to prepare, while Level III packets required 10.7 days. It should be pointed out, however, that the turnaround on Levels II, III, and IV packets included a 3-4 day wait for the computer printout to arrive by mail from California. The average turnaround time across all levels was 8.7 working days.

Table 7 shows the average amount of staff time required to locate the information, read, analyze, and select the most relevant materials, and to prepare the packet for mailing. There are three major phases of packet preparation: information location, review and selection, and final preparation. On the average request, EIC staff spent 1 hour 27 minutes locating information, 2 hours 12 minutes reviewing it, and 2 hours 38 minutes doing the final packet preparation. Average total time required to prepare a research packet was 6 hours 48 minutes.

Table 7: Average Packet Preparation Time (Minutes)

Process	Level	1	2	3	4	5	Overall
	(n=	205	294	445	146	3)	
Negotiation of Question with Client		6	7	8	7	18	7
Staffing		6	11	19	25	33	15
Location of Information		36	40	114	170	210	87
Review & Selection of Information		7	14	207	324	85	132
Final Packet Preparation		102	29	235	338	160	168
Total Preparation Time (In Hours)		157 (2.6)	102 (1.7)	581 (9.7)	865 (14.4)	507 (8.5)	409 (6.8)

The figures in Table 7 account for both professional and clerical staff time. Professional staff time requirements increase substantially as the level of complexity of a search increases. Six to nine times as much professional staff time is required to locate, read, analyze, and select information for a Level III or IV research packet, compared to a Level I or II packet. But for most packets, the activities requiring the most staff time are in final packet preparation, i.e., typing, xeroxing, and microfiche duplication--all clerical activities--and preparation of the selected bibliography and cover letter by the researcher in charge of the search.

Table 8 displays the average amount of time spent on each activity which may be necessary to develop a research packet, from initial search negotiation to final packet preparation. These two sets show that not every function is required for every packet. For example, a manual bibliographic search is performed in relatively few cases, so for this function the average over all searches is five minutes. Where it is required, however, the average amount of time spent is 36 minutes.

Table 8: Research Packet Preparation Time by Activity

Activity	Average Minutes (All Cases)	Average Minutes (Occurrences Only)
Negotiation	7	7
Staffing	15	18
LOCATION	87	87
Strategy	11	13
Manual Bibliography	5	36
Online Bibliography	4	13
Offline Bibliography	18	24
P.L.S.	13	35
G.S.U.	16	43
Vertical File	3	11
Document File	5	15
Reference Tools	5	16
Consultants	3	26
Other	4	16
REVIEW/ANALYSIS	132	161
FINAL PACKET PREPARATION	168	168
Prepare Cover Letter/Notes/Bibliography	24	31
Document Loan	3	14
Duplicate Microfiche	30	62
Xeroxing	60	104
Final Review of Packet Contents	8	22
Type Cover Letter/Other	19	38
Mail/Deliver/Call	7	7
Paperwork	18	18
TOTAL PREPARATION TIME (IN HOURS)	409 (6.8)	409 (6.8)

Summary

The Education Information Center is a research and information analysis service provided to public school administrators and consultants by the Georgia Department of Education. Its purpose is to help its users save time and do a more effective job by finding out what others have already written, developed, researched, or learned about an educational problem or issue.

Through the utilization of a broad base of information resources--computerized data bases, document collections, libraries, journal articles, microfiche files, and files of validated programs--EIC staff responded to more than eleven hundred research requests from Georgia educators between April 1979 and March 1981.

The overwhelming response to EIC by its user population has been positive and indicates that the Center is effective in meeting its mission of providing new ideas, awareness of alternative decision-making options, and generally upgrading the level of information on which professional educators in Georgia base their actions.

Education Information Center

USER REQUEST FORM
GEORGIA DEPARTMENT OF EDUCATION
212 State Office Building
Atlanta, Georgia 30334
(404) 656-2402

[ ] first request

USER'S NAME_____

POSITION_____

ADDRESS_____

_____

_____

PHONE (Area)_____(No.)_____

Date Information Needed_____

USER DESCRIPTION
Ga. Dept. of Ed.
[ ] Office_____
Local
[ ] System_____
[ ] CESA_____
[ ] GLRS_____
[ ] Other_____
[ ] Needs Microfiche Reader

QUESTION (state real-world problem concretely and completely)*:

_____

_____

_____

HOW IS INFORMATION TO BE USED? (e.g., making a decision about....)

_____

_____

_____

RESTRICTIONS:

Time span: From 19_____

Age:_____or Grade:_____

Subject Area:_____

ED only_____EJ only_____

Has requester contacted or searched other sources?_____

[ ] curriculum guides
[ ] general overview of topic
[ ] inservice programs
[ ] manuals, guidelines, "how-to"
[ ] program descriptions
[ ] program evaluations
[ ] research
[ ] tests, measurement instruments
[ ] validated projects (JDRP)

*ADDITIONAL INFORMATION ABOUT REQUEST:

EIC USE ONLY

Researcher_____

Negotiator_____( )

Level_____

Search No._____

Date Rec'd_____

Date Needed_____

Date Run_____

Date Sent_____

Turnaround time_____

Bibliography
[ ] EIC selected
from search #_____
[ ] computer on-line
_____
[ ] computer off-line
_____
_____
[ ] former search #_____
[ ] other_____
[ ] EIC paper
[ ] fiche_____docs.
ED_____
_____
[ ] doc. reprints_____items
[ ] doc. loan_____items
_____
[ ] consultant/site ref.
_____
_____
[ ] other_____
_____
_____
[ ] portable microfiche reader
Total xerox copies_____
Eval. form sent_____
Eval. form rec'd._____

Results 1979-81

Researcher_____

EIC LITERATURE SEARCH EVALUATION FORM

Name_____ Search #_____ Level_____

Position_____ Topic_____

Institution_____ _____

The Education Information Center (EIC) is making continuing efforts to improve its services. One means of doing this is through feedback from users about the information packet provided by the EIC. Your evaluation of our response to your request on this topic will be appreciated.

$\bar{X}$ 1. To what extent did you find it easy to specify your topic with the person handling your request? (Circle the number which approximates your assessment.) σ

4.76 Easy 5 ____ 4 Ave. 3 ____ 2 Difficult 1 .6

2. To what extent was your topic adequately covered by the information package?

4.51 Very Good 5 ____ 4 Ave. 3 ____ 2 Poor 1 .8

3. The amount of information you received was:

1.97 Too Much 3 About Right 2 Too Little 1 .3

4. The information you received arrived:

2.98 In time for your purposes 3 Late but still useful 2 Too late for your purposes 1 .2

5. To determine for what purpose you requested information, and also in what way you have used or will use the information received, indicate in the first column your primary intended purpose and in the second your primary actual use. (Please check only one in each column.)

Intended purpose	Actual use	%	
[]	[]	19	making a decision on an educational issue
[]	[]	32	planning a new program or program improvement
[]	[]	23	staff development, inservice
[]	[]	6	evaluation of_____
[]	[]	18	writing a proposal or report
[]	[]	12	making a presentation
[]	[]	10	other_____

DE Form 0872, January 1979 (OVER)

53

Results 1979-81

6. Please summarize your impression of the usefulness or value of the information received. (Check as many as apply.)

	%	
[]	67	provided new ideas
[]	46	provided additional alternatives for decision making
[]	38	increased awareness of other problems to be encountered
[]	40	helped formulate new questions or identify new avenues of inquiry
[]	62	increased awareness of scope of materials available
[]	45	reinforced present thinking
[]	5	other_____
[]	.6	was of little or no assistance

X 7. With how many others will you be sharing the information you received on this topic? 0

23

More than 50	11-50	6-10	2-5	Just 1	None
6	5	4	3	2	1

11

8. How many hours do you estimate you have saved by using EIC services to research this topic?

28

0	Less than 4	4-6	6-8	8-10	10-16
1	2	3	4	5	6

29

16-25	25-45	45-75	More than 75
7	8	9	10

9. To what extent do you consider the information searching service of EIC to be useful for your professional functioning?

4.9

Very Useful		Useful		Negligible
5	4	3	2	1

.4

10. What do you like least about EIC services?_____

11. What other comments, criticisms, or suggestions can you offer about EIC services?

Georgia State Department of Education, Atlanta, Ga. 30334

N=275 Return rate = 53%

Name_____ Search Topic_____

Search Number_____ Date_____

EDUCATION INFORMATION CENTER IMPACT EVALUATION

1. To what extent did the information you received from the EIC influence a decision to make a change in: (Check all that apply.)

	substantially	moderately	somewhat	not at all	don't remember	No response
a. Classroom-level practice	( ) 16%	( ) 20%	( ) 17%	( ) 20%	( ) 5%	21%
b. School-level practice	( ) 16%	( ) 16%	( ) 20%	( ) 18%	( ) 5%	24%
c. System-level practice	( ) 18%	( ) 17%	( ) 21%	( ) 18%	( ) 5%	21%
d. CESA-level practice	( ) 21%	( ) 17%	( ) 12%	( ) 25%	( ) 3%	22%

Briefly describe the nature of the change:_____

2. To what extent did the information influence a decision NOT to make a change?

substantially	moderately	somewhat	not at all	don't remember	
( ) 5%	( ) 2%	( ) 6%	( ) 46%	( ) 6%	33%

Briefly describe the nature of the proposed change:_____

3. After a decision had been made to go ahead with a new activity or practice, such as a program adoption, workshop, proposal, program evaluation, management practice, etc., to what extent did the information help in developing or implementing the activity or practice?

substantially	moderately	somewhat	not at all	don't remember	
( ) 32%	( ) 13%	( ) 17%	( ) 7%	( ) 8%	21%

Briefly describe the nature of the activity:_____

4. Did the information you received ultimately have a recognizable effect on classroom practice? 26%

44% yes 27% no

If so, briefly describe:_____

5. Would you be willing to discuss your responses further? ____yes ____no

If so, please give a phone number where you can be reached in June or July. ____/____
Area